



Commissioner for Patents  
USPTO  
Washington, DC 20231

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### **Petition from requirement for restriction**

Respectful Commissioner,

The applicant appeals the Commissioner for reconsideration of the requirement for restriction. The examiner argues that the claimed plasmids are distinct and it is a burden of search to examine the plasmids in a single patent application. The applicant appealed on June 19, 2007 for reconsideration of the requirement. The applicant's petition was denied on August 13, 2007.

The applicant disagrees with the requirement for restriction and request for reconsideration of the plasmids presented in the claims 26 to 40 to be examined in one group as a single invention.

The plasmids presented in claims 26 to 40 are synthesized by same design. The design was schematically illustrated in Fig. 1 of the application. As a matter of fact, all plasmids presented in the application were synthesized by this design and they were synthesized simultaneously in the same series of experiments.

The plasmids presented in the application have different sequences because they consist of different replication origins and different selection markers. However all of these

different replication origins and selection markers are connected by same two linker sequences. These linker sequences are CCGCCGCGCCGC and GGCGGGCGCCCCGG CGGGCGGGCG. No other natural or man-made plasmids except those presented in this application contain exactly all these two linker sequences. These linker sequences are intrinsic connection of these plasmids. They are the evidences that these plasmids are made by same design. They are the evidences that these plasmids are related.

In addition, these plasmids are functionally related. All claimed plasmids are based on pACYC replication origin which gives low copy number. Unexpected results of high copy number are observed with claimed plasmids. This functional property is useful because the protein expression in high copy number plasmids is higher than the expression in low copy number plasmids. High copy number plasmids are also useful in plasmid DNA production. Furthermore, the claimed plasmids appear to confer higher antibiotic resistance capacity for the host cells. Therefore the claimed plasmids are clearly functionally related.

Therefore the applicant presented evidences on the record that the presented plasmids are structurally and functionally related and respectfully requests that the petition for the plasmids presented in the claims 26 to 40 to be examined in one group as a single invention is granted.

No petition fee is included as set forth in 37 CFR 1.17 for petition from requirement for restriction.

Sincerely,



Chuan Li

Applicant name: Chuan Li

Title of the application: DE NOVO SYNTHESIZED PLASMID, METHODS OF  
MAKING AND USE THEREOF

Application number: 10/068,664

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